Why We Are Here

What activity produced one of the highest levels of air pollution in Washington state?
About Columbia Pulp

• Using innovative and proprietary technology, Columbia Pulp’s next generation pulp mill is the first in North America to turn 250,000 TPY of residual wheat straw into cellulose fiber.

• North American based production with an established annual feedstock addresses security of supply issues.

• Produces 140,000 TPY of straw pulp to complement wood fiber for the manufacture of tissue, towel, paper, molded and packaging products.

• Yields 75,000 dry tons of bio-polymers annually for industrial and agricultural applications.

• Creates a solid fiber stream for compost, animal bedding, heating pellets and other uses.
Columbia Pulp Plant

Strategically located in Southeastern Washington State

- One of the leading wheat growing regions in the world
- Year-round straw availability and delivery
- 450-acre site at Lyon’s Ferry, Washington
- Mainline rail and interstate highway access
- Natural gas pipeline runs through facility

Straw sourced & stored locally

- Over 4 million tons of straw per year produced within a 75-mile radius of site
- Contracted feed straw supply with Columbia Straw

State-of-the-art resource efficient process

- Lower energy, chemicals and water per ton than traditional pulp mills
- Sulfur free process - no odor
- Unbleached & TCF
- Closed loop process
**Environmental Impact**

- Replacing 140,000 tons of conventional pulp annually, using Columbia Pulp’s products, will result in 133,000 metric tons of CO2 carbon savings per year. This is equivalent to:
  - The CO2 absorbed by approximately 5.8 million trees each year
  - The CO2 emitted by approximately 40,000 cars, each driving 10,000 miles per year

- Utilizing wheat straw as a feedstock:
  - Eliminates the need to burn 250,000 tons of straw waste (approximately 100,000 acres)
  - Reduces approximately 45,000 tons of air emissions
Target Markets - Pulp

**Tissue & Towel**
- Low coarseness
- Higher tensile strength than NBSK
- Can provide bulk on TAD machines

**Packaging – Corrugated/Folding Carton**
- Cleaner & brighter than OCC
- FDA direct food contact

**Printing & Specialty Paper**
- Increased smoothness
- Increased opacity
- High tensile & tear strength

**Molded Fiber**
- Reduces food packaging waste
- Stiff product with smooth surface
- FDA direct food contact
Target Markets - Bio-Polymers

**Deicer additive  CBP-Duration™**
- Corrosion inhibitor
- Reduces Ice bond to pavement
- Sticker prolongs performance and reduce waste

**Dust suppression  CBP-SurTac™**
- Soil stabilizer
- Reduces Dust
- Corrosion Inhibitor
- Non-Toxic chloride alternative

**Crop & Soil Health  CBP-Harvest™**
- Natural organic matter and micronutrient source
- Enhances Nitrogen Use Efficiency
- Sticker and drift inhibitor
- Improves soil structure and water use efficiency

**Animal Nutrition  CBP-THRIVE™**
- Natural source of essential minerals, crude protein, & carbohydrates
- Digestive aid increases nutrient uptake
- Feed binder improves pellet & granule quality

**Cement Additive  CBP-CA2020**
Target Markets - Solid Fiber

Compost – Residential and Agricultural
- High organic content
- Aesthetic appeal
- Moisture holding capacity
- Nutrient recycling

Animal bedding and Arena Soil Conditioner
- High moisture holding capacity
- Dust control
- Ammonia and nitrate retention
- Odor control
- Biodegradable and septic safe

Fuel pellets
- No foreign objects
- Low ash content
- Lower price point

Desiccant
- High moisture holding capacity
- Bulk fluff, bagged fluff, pellets
Challenges/Issues

• Seasonal road traffic - harvest related
• Infrastructure
  • Road condition
  • Bridges - Lyons Ferry capability
• Weather impact
• Employee commuting